DOCUMENT RESUME

ED 252 507 SP 025 696

AUTHOR Everson, Susan T.
TITLE School Effectiveness: Overview of the Research.
PUB DATE Jan 83
NOTE 12p.; In: Anderson, Shirley, Ed. School Effectiveness: Climate, Goals, and Leadership. Summary and Proceedings of a 1982 Regional Exchange Workshop. p3-13. For the complete proceedings, see SP 025 695.
PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Classroom Research; Classroom Techniques; *Educational Environment; Educational Quality; Elementary Secondary Education; *Institutional Characteristics; *School Effectiveness; School Organization; Student Evaluation; Teacher Effectiveness; Test Validity; *Time Management; Time on Task

ABSTRACT

An overview is presented of school effectiveness research which has identified characteristics of academically successful schools. The research reviewed has reexamined such things as the way educators manage time, assign students, define curriculum, determine class size, organize schools, and assess achievement. This report focuses upon three critical areas in the school function: teaching, curriculum and assessment, and building level or school level management. In considering effective teaching, emphasis is placed upon the teacher's management of academic learning time and diagnosing student learning problems and meeting instructional needs. The second element of schooling considered is the relationship of testing to the curriculum. The third element examined is the relationship between building level management and school effectiveness. The findings of research studies on school climate, leadership quality, teacher expectation, school monitoring systems, and consensus on academic goals in schools are discussed. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED252507

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

SCHOOL EFFECTIVENESS: OVERVIEW OF THE RESEARCH

by Dr. Susan T. Everson

For the last 10 to 12 years, studies have been designed to look inside buildings, inside classrooms, and to begin showing characteristics that exist in some buildings and not in others--characteristics that make a difference in the academic success of the students in those schools.

Researchers found characteristics in the more academically effective classrooms and buildings that did not exist in the less effective ones.

Researchers found that even though schools had the same levels of teacher certification, the same kinds of students, same number of books in the library, etc., there were differences in academic results. Some schools are more effective than others.

The same thing was true at the classroom level. We look at classrooms, and we say, "Oh, I know the classroom down the hall where every year the students coming out of that classroom are doing better than they are in other classrooms."

Researchers observed those classrooms and school buildings to describe what it is that occurs in those buildings and in those classrooms that makes the difference.

Researchers found characteristics in the more academically effective classrooms and buildings that did not exist in the less effective ones. There was a group of characteristics that emerged, and researchers found that all of these characteristics had to be present for the school to be the more effective school. In other words, four out of five characteristics weren't enough. I want to point out that this research is descriptive research. We're not talking about theory. I find that as I work with teachers, administrators, and state education agency people, they are delighted to know that all of this research wasn't developed in some laboratory by some people in a dark room who came out and said, "This is what you should be doing."

Practitioners are delighted to know that all of this research wasn't developed in some laboratory by some people in a dark room.

It's descriptive of good school practice in real school buildings and real classrooms with real teachers and real students. There are some flaws in that, because we can't say if you do this, that will occur. But there is enough in the body of research so that we can say that there's a pretty good chance that if all of these characteristics are present in your school, you're going to begin seeing some results in student outcomes.

SP 02 696

An effective school is a school where children or students from all socioeconomic levels have an equal chance to succeed.

"Don't tell me those kids can't learn. I'll show you a school where they are learning!"

Before we go any further, I want to define "effective" as it relates to schools. I think that's a term we throw around quite frequently, and if we all wrote down our definitions right now, I think we would see many different definitions. In Ron Edmonds' research, an effective school is a school where children or students from all socioeconomic levels have an equal chance to succeed. And what that means is that the proportion of low income kids in the school succeed at a mastery level equal to the proportion of middle and high income kids that succeed in that mastery level. As an example, we'll say that 80 percent of your students in a school are middle and high income kids. and 20 percent are low income level. Of that 80 percent, 50 percent of those kids meet a mastery level or above. That means 50 percent of the low income kids (the other 20 percent) must meet that mastery level as well. It doesn't mean everybody is functioning at the exact same level. There is a minimum level, above which proportionally low, middle, and high income students perform.

While that is a demanding standard, remember that there are schools across this country that are meeting that definition. A couple of weeks ago in Kansas City, I heard Ron Edmonds say it beautifully, "Don't tell me those kids can't learn. I'll show you a school where they are learning!"

And so for the next two days, I advocate a look at this research, looking at effectiveness in a way that helps all students, not just a portion of the kids that are in school. Another point is that this isn't research about an add-on program; it isn't something else you have to do after school or during lunch. What you will hear focuses on good organizational practice--simply that.

Let's move to an overview of this research. At McREL we've organized this research into three areas. This is McREL organization, and this is not the way it comes out in research reports. As we looked at it, we found that if we put this information into three main areas, we could pretty well find a place for everything. Interestingly, when I looked at the program that is planned for these two days, it fits beautifully.

The first area is the area of Teaching. Teaching is everything that happens in the classroom. It's the instruction that goes on, and we'll talk about that in just a minute.

Using this research requires a reexamination of such things as the way educators manage time, assign students, define the curriculum, determine class size, organize schools, and assess achievement.

The second area is Curriculum Assessment Relationship. And interestingly, you will have a three hour session on that with Dr. Roger Scott from Southwest Regional Laboratory. At McREL, we happen to base a lot of our work on SWRL's work. They were the ones who really pushed us off and got us started in that area. So I will talk about curriculum and assessment, how that affects schools, and the relationship of that to achievement.

The third area is Building Level Leadership or Organization. And of course, you're going to have a session with Gene Howard on school climate at the building level, and that fits beautifully. So I will show you now the overview of those three areas.

Educators have always looked for ways to improve schools. And anyone who has visited a classroom recently knows that there have been dramatic changes in schools over the past few decades. The stereotypic vision many critics have of education is simply not a correct image of most contemporary schools. Just as fast as improvements have been made, new demands are placed on schools and new improvements are required. The cycle is never ending, and it is the mark of today's educators that they are constantly on the watch for ways they can improve instruction for everyone.

Just as a physicist has recently discovered elements of matter below the unit of the atom, we need more precise ways of defining educational concepts.

For the next several minutes, I'll present information about recent research findings that offer opportunities for school improvement in the immediate future. Some of the research is quite new. It provides a practical common sense approach to education for teachers and administrators. Using this research, however, requires a reexamination of such things as the way educators manage time, assign students, define the curriculum, determine class size, organize schools, and assess achievement. For over 30 years, our way of doing things has changed little. Recent research argues for a reexamination of these traditional elements of schooling.

Just as a physicist has recently discovered elements of matter below the unit of the atom, we need more precise ways of defining educational concepts. And if we do that, we believe many of the current problems we now face can be successfully resolved. Time doesn't permit an examination of every area, so to make the point, I'm going to focus on three areas--and these are the same three I have just mentioned: Teaching, Curriculum and Assessment, and Building Level or School Level Management.

Teaching

Today I will look at just one aspect of each of these areas. For example, in the area of teaching, we will look at time management, and we will draw on only one of several studies that point to the need to reexamine our traditional concept about time usage in the schools.

Not only were differences found from one school building to another, but in the same school, there were tremendous differences in the amount of time devoted to subjects.

The research we will draw on comes from the Beginning Teacher Evaluation Study (BTES) carried out by the Far West Laboratory for Educational Research and Development. The traditional concept of time is what BTES calls assigned time. That is simply the amount of time devoted to something: four years of secondary education, 36 weeks to ninth grade general science, or two hours a day to second grade reading. BTES has shown that there is not only considerable variation in how much time one teacher or school devotes to something like reading, but more importantly, a great deal of the amount of time assigned or dedicated to that activity is lost. And here I want to point out that not only were the differences found from one school building to another, but in the same school, there were tremendous differences in the amount of time devoted to subjects.

Sometimes as little as one-quarter of the school day is used for academic learning. And I'm going to show you now how we come to that conclusion. BTES supports this conclusion by breaking the concept of time into three elements: (1) assigned time is the concept I've just mentioned to you; (2) engaged time I'll discuss now; and (3) a third element we'll turn to in just a moment.

Sometimes as little as one-quarter of the school day is used for academic learning.

Engaged time is the portion of assigned time that a student appears to be studying or actually learning. And that's exactly what it is. That's what the observers watch. They watch students, and they check off when the students are doing what the teacher assigned. Students can be involved in academic activity and not be engaged. They have to be doing what is assigned at the time. If it looks like the student is involved, they are checked off as engaged in the task at hand. It's that simple.

Engaged time varies considerably for each student. Note that engaged time is not always related to the amount of assigned time. There are students who use every minute that we've given them to do what we've asked. Others are not so highly engaged.

Engaged time is still not enough, and that's where I think we're beginning to realize there's more to this time matter than we've thought. BTES researchers found that there was another element. They called it ALT (Academic Learning Time). That concept is defined as engagement plus a student success rate of approximately 60 to 90 percent. Now that sounds complicated. I want to take just a minute to tell you that it is not that complicated.

If students experience too low a rate of success, they become frustrated and bored.

Success rate is simply the number of right answers out of opportunities to answer for each student. That includes written and oral answers. So, for example, a student may have ten chances to answer a question and he/she answers correctly eight times. That student, for that time, has an 80 percent success rate. Now, a one time success rate tells you little. We're talking here about a continuous rate over time. In order for ALT to occur, you've got to have a student succeeding between 60 and 90 percent of the time. Ideally, 80 to 85 percent is what you hope for. That's what we work for with our teachers.

BTES found that if students experience too low a rate of success, i.e., if they were successful only 10 to 40 percent of the time, they became frustrated and bored. They were doing no better than chance and probably did not master the task. In fact, what the research says is: if students are unsuccessful more than 60 percent of the time (in other words, if they have a success rate less than 40 percent), they have a negative relationship to learning the task at hand.

If the students are very successful, succeeding more than 90-95 percent of the time, they also become bored.

If the students are very successful, the other end of the continuum, succeeding say more than 90-95 percent of the time (and remember we're not talking about a daily rate, but over time), they also become bored. They start making careless errors and stop attending. We know that for gifted and talented kids the dropout rate is high. We also can think of students who say, "I've done 5 of those math problems, and they're right. Why should I have to do the other 25?" They piddle around, they don't attend, and they are bored.

Again, there is much variation from one student to another in terms of Academic Learning Time. Also please note that, again, it is not directly related to engaged time or assigned time.

ALT is simply a mathematical equation. A high engagement rate plus an appropriate success rate equals ALT. If you look at it that way, it's easy to remember.

ALT is important because it has the highest relationship to academic success, higher than assigned time or engaged time. ALT was so significant that BTES found that a student who started at the 16th percentile and received only 100 minutes of ALT in reading made little progress during a five-week period. But a student who's ALT was dramatically altered after receiving 1,500 minutes (that's only 54 minutes a day over five weeks) moved from the 16th to the 36th percentile in reading during a five-week period. In other words, with the lower achieving students they could dramatically raise reading scores in five weeks by adjusting the ALT. And that's an incredible finding. I think we wonder all the time how we can reach low achieving kids. We can reach those kids if we can adjust the ALT for them.

I think we wonder all the time how we can reach low achieving kids. We can reach those kids if we can adjust the ALT for them.

The question I know that's on your mind is, "Okay, that's all well and good, but how do you do that?" Well, the research doesn't tell you that. It doesn't say, "Well, if this is what you want, these are the six things that you need to do." But you can read it and there are inferences in there. Classrooms are described where ALT rates are high. The reader can begin to see that in those classrooms certain things are in place.

Some of you were here last year when there was a workshop on classroom management. That happens to be one of the things that affects ALT. At McREL, we looked at areas that seemed to have an effect on ALT. I'd like to show you what they are.

You can decrease class disruptions through careful staff coordination allowing children every minute assigned to effectively carry out their responsibilities.

First, a simple one. You should examine your schedule to maximize the amount of Adademic Learning Time available, particularly at the secondary level. Some of the high school teachers say, "I can't get everything taught in 55-minute periods." Well, there's no magic in a 55-minute period, and it may be that the schedule alone is keeping you from having a higher ALT rate.

Second, you can decrease class disruptions through careful staff coordination allowing children every minute assigned to effectively carry out their responsibilities. This has to do with the nurse coming to the door saying, "I'd like John Smith, please" and everybody's head going up; the squawk box; and Title I interruptions. An effort is made to get that problem organized and minimized. One school I worked with, for example, has now scheduled all of their assemblies for next year. They will meet at the end of the day on a specific day each month, so that there isn't any question about interrupting important times when the students are supposed to be doing some other things.

Third, and this is an important one to a lot of people, you can decrease time lost to disciplinary activities. Every oral reprimand results in time lost to the corrected student, time lost for the teacher to help others, and time lost as other students' attention is distracted.

Every oral reprimand results in time lost to the corrected student, time lost for the teacher to help others, and time lost as other students' attention is distracted.

Fourth, students' attention can be increased by using motivational techniques, such as those that come from good ideas of other teachers. This happens to be an area in which people are very interested. You'll have people say, "My students don't cause me any trouble, but they sit there like bumps on a log. I cannot get them interested." We've found some very good material, and it's based on research. One of those, my favorite, is from Johns Hopkins University: Teams, Games, and Tournaments (TGT)--or Student Team Learning.

Fifth is classroom organization. You have had a workshop on this. It's known to be a critical factor in student engagement. For example, Carolyn Evertson, has shown that the way a teacher begins the school year is crucial to student engagement and achievement throughout the year.

Sixth, student success rate, a component of Academic Learning Time, can be increased by improving a student's expectations of success. For example, research suggests that many teachers subconsciously signal low expectations for some students. These expectations in turn result in lower achievement.

Finally, proper diagnosis of student learning problems can lead to increased achievement by helping teachers prescribe instructional activities that individual students need most.

Norm-referenced testing does not tell us how effective our instructional techniques are, and unfortunately, it's been used for that purpose.

Curriculum and Assessment

A second element of schooling that needs to be rethought has to do with the relationship of testing to the curriculum. For example, let's focus on the questions of whether standardized tests are an appropriate way to judge the effectiveness of schools. And I want to stop and make sure you understood what I just said. Norm-referenced testing does not tell us how effective our instructional techniques are, and unfortunately, it's been used for that purpose. You know that the public sometimes tells us about how well we're doing based on recent test scores. I'm saying that

these tests do not give us an assessment strategy for individual school effectiveness.

A traditional model of school assessment equates tests, and norm-referenced tests in particular, with school achievement. Although some schools use less traditional methods, almost all have their students tested annually on commercial, nationally-normed tests. Well, there's a problem with that.

Thirty to forty percent of the items on leading tests are not covered by the leading commercial textbooks at the same grade level.

First, there's good evidence that a great deal of the tests' content isn't taught. A recent analysis by the Institute for Research on Teaching has shown that 30 to 40 percent of the items on leading tests are not covered by the leading commercial textbooks at the same grade level. Further, in reading, students have to possess vocabularly and use vocabulary that is introduced in grade levels ahead in order to come out at norm on the norm-referenced test.

Now of course, the problem is more serious if you assume that the textbook is the principal vehicle of instruction. And in fact, surveys indicate that the majority of teachers are guided primarily by the textbook, not by their own or the district's curriculum guide. Assuming then that teachers don't cover all the items covered by leading tests, we can't underestimate the effects of non-school influences on test success. Students with more non-school sources of academic learning will always do better on norm-referenced tests if they do not accurately measure the instruction in their school.

A norm-referenced testmaker works to make sure a good test item averages failure by about half the students.

Another problem with using norm-referenced tests for school evaluation is that these test items are explicitly designed so that only half the students pass. That is to ensure that the students' scores are distributed across the normal curve. A norm- referenced testmaker works to make sure a good test item averages failure by about half the students. And to accomplish this they deliberately make some items artificially difficult. And, as a result, these items don't accurately measure the effect of instruction.

We must reexamine the traditionally accepted methods of evaluating students in schools. And if we do, we can expect to show results. A better alignment of what we test with what we teach will produce a clear picture of the effectiveness of schools and instruction.

Building Level Management

They measured the amount of emphasis placed on academics, . . . appropriate use of rewards, . . .

Finally, let's turn to one other area to make the point, the area of school building management. A recent study from England presents some powerful information about how effective schools can be and what makes them effective. I'm talking here about 15,000 Hours, a study of secondary schools. We also can look at the work of Ron Edmonds, Larry Lezotte, and others. They found characteristics of effective elementary schools. The study I shall discuss is called 15,000 Hours, because that's approximately the number of hours a student spends in Britain's schools. The study is important to us, because it reexamines the theory that outside factors are more important for determining learning than schools--such things as economic and family background, language experience, and prior learning. The study looks beyond the usual measures of schools, such as the amount of money spent, the number of books in the library, the degrees the teachers have, the newness and stylishness of buildings, and the way we group students and determine class size. And these, by the way, are the measures most previous studies have used to detemine what makes schools most effective. It should not be surprising to us that many of these studies have labeled schools ineffective. Instead, 15,000 Hours researchers looked at what went on in classrooms and school buildings. They measured or observed the amount of emphasis placed on academics, the consistency with which common goals are shared by teachers and communicated to students, teacher engagement in students' learning, appropriate use of rewards, and the degree to which students participated and shared in the responsibility in the schools. Schools that did well in these dimensions of schooling together produced higher student achievement scores, fewer discipline problems, and better attendance rates. These aspects of schooling are so powerful that subsequent research has shown they can significantly reduce the effect of socioeconomic backgrounds and language experience.

The fancy newness of the building didn't make a difference; but how clean, orderly, and safe it was did make a difference.

The characteristics that Edmonds found are very similar, and I want to give you those five characteristics. First, in the area of school climate, they found that the fancy newness of the building didn't make a difference; but how clean, orderly, and safe it was did make a difference. So having a building built in 1980 wasn't going to help you unless it was clean, orderly, and safe--a nice place for students to be.

Second, there was an academic leader in every building. And most often it was the principal, but it didn't have to be the principal. There was an academic or instructional leader. Basically, that is a person who looks at his or her job as one of curriculum and instruction first and foremost. This is a difficult thing to take on, and it will be a new focus for some of us.

It wasn't that these people were always looking for innovation and new programs, but they simply would not live with the status quo.

Third, teacher expectations were high in these schools. And I think it's interesting to know how the researchers did this research. They didn't go in and ask teachers how they felt about kids or school. What the researchers did was observe teaching behaviors. They watched teachers teach, and then they talked with the students about the work they had to do.

Fourth, effective schools had a monitoring system. That sounds difficult; it really isn't. Basically, when teachers get the test results, they spend their time looking for areas of weakness and strength so that improvements can be made in needed areas. It wasn't that these people were always looking for innovation and new programs, but they simply would not live with the status quo. They moved on to improve those areas that they saw as weak.

The fifth characteristic focuses on shared goals. School population consensus of the academic goals in the schools is critically important for effectiveness. Agreed upon, common focus is the issue.

Researchers have shown that it is the sub-elements of schooling that make the difference and not the number of degrees the teacher has, or the number of books in the library.

In closing, the point I'm trying to make is that these elements are not the traditional ways in which we have measured the quality of schools. And yet, researchers have shown that it is the sub-elements of schooling that make the difference and not the number of degrees the teacher has, or the number of books in the library. We need to find new ways of operationalizing the concept of school management. And building level leadership must be much more carefully tied to these new elements than limited to the traditional function of the principal's office.

Let's close this presentation by emphasizing the two things that I've been trying to say. First, what goes on in a school does make a difference, but the old ways of defining the "what" are now inadequate. Second, research is pointing to new ways we can increase effectiveness. For example, if we increase the amount of ALT, if we improve the articulation between what we teach and what we test, and if we work to create better building level leadership and organization, we should be able to produce some dramatic gains in

student achievement. We think that if these improvements are made now, the effort will help to resolve many of the current attacks on education. Many people see these attacks as attacks on schools and educators. We prefer to think they reflect the need to reexamine the way we have described schools. If we use research to redefine education, we can have better schools now.